

## ABSTRACT OF THE DISCLOSURE

A method and apparatus to screen individuals specifically for paramagnetic or ferromagnetic objects they may be carrying or wearing, before they enter a controlled area. The device comprises a screening portal, including at least one magnetic  
5 gradiometer and its electronics. The device places all of the sensor arrays in close proximity to a subject's body, for screening purposes. The portal has at least one excitation coil oriented to cause the excitation field to have zero mutual inductance with the gradiometers.